

Contact Lenses

Contact lenses are thin, clear, disks of plastic that float on the tear film that coats the cornea, the clear front window of the eye. Contact lenses are used to correct the same conditions that eyeglasses correct:

- Myopia (nearsightedness);
- Hyperopia (farsightedness);
- Astigmatism
- Presbyopia
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Hard Contact Lenses

Most kinds of hard contact lenses are rarely used today. However, **rigid gas-permeable (RPG)** lenses, which hold their shape, yet allow the free flow of oxygen through the lens to the cornea, are easier to adjust to and more comfortable to wear than the older kinds of hard lenses. These lenses may be the best choice in cases where the cornea has enough astigmatism (that is, shaped like an egg instead of an orange) that a soft lens will not provide sharp vision. They may also be preferable for people with allergies or who tend to form an excess of protein deposits on their lenses.

Soft Contact Lenses

Soft contact lenses are the choice of most contact lens wearers for their comfort as well as for the many options available today. These options include:

- **Daily-wear lenses.** These lenses are the least expensive, are removed and cleaned nightly, and are replaced on an individualized schedule. They should not be used as an extended-wear lens.
- **Extended-wear lenses.** These lenses are worn overnight and are removed at least weekly for thorough cleaning and disinfection. They are being recommended less frequently, since there is a greater risk of corneal infection with any overnight wear of contact lenses. The decision to accept the risks and benefits of extended-wear lenses requires a process of evaluation between you and your ophthalmologist (Eye M.D.). Once you have been carefully fitted for your contact lenses, it is important to have follow-up examinations with your ophthalmologist to ensure continuing eye health. As with any contact lenses, extended-wear lenses should be removed at the first sign of redness or discomfort.
- **Disposable-wear lenses.** These lenses are more expensive but more convenient. They are removed nightly and replaced on a daily, weekly, or monthly basis. Disposable lenses are sometimes recommended for people with allergies and for those who tend to

form protein deposits on their lenses. Colored and toric lenses can be disposable as well.

- **Colored contact lenses.** These lenses can change the appearance of your eye color to varying degrees. Just like other contact lenses, colored (or tinted) contact lenses are medical devices that require a prescription. The same precautions and care regimens apply to colored contact lenses as to other lenses.
- **Toric contact lenses.** These lenses can correct astigmatism, although sometimes not as well as RGP lenses. They usually cost more than other contact lenses.

Contacts for Presbyopia

As one ages, correction for near vision is often necessary because the lens of the eye cannot change shape as easily as it once did. This common condition, called presbyopia, can be corrected in one of three ways:

- Wear your distance correction in the contacts and wear reading glasses when needed.
- Wear one contact for distance vision and one for near vision. This option is called monovision; it works well for many people but not for everyone. You may need a trial period to decide if monovision is for you.
- Wear bifocal contacts, which are designed to allow both distance and near vision. These lenses are somewhat more expensive to fit and may not provide satisfactory vision for all people.

Caring for Contact Lenses

Lenses that are old or not properly fitted may scratch the eye or induce blood vessels to grow into the cornea, so their fit should be re-evaluated on a regular basis.

Any lens that is removed from the eye needs to be cleaned and disinfected before it is reinserted. Lenses that are not properly cleaned and disinfected increase the risk of eye infection. Your doctor will discuss the best type of cleansing system for you, depending on the type of lens you use, any allergies you might have, and whether or not your eye tends to form protein deposits. Care of contact lenses includes cleaning their case, since it is a potential source of infection. The case should be rinsed with water, wiped, and allowed to dry.

Eyedrops can interact with all types of contact lenses, so it is best to avoid their use while wearing lenses, except for wetting or lubricating drops recommended by your eye doctor.

Daily-wear lenses should not be worn while sleeping.

Homemade saline (salt-water) solutions have been linked to serious corneal infections and should not be used.

Cosmetics and Contact Lenses

Contact lens wearers who use cosmetics are at special risk for eye problems, including irritation, allergy, dryness, injury, and infections of the eye. They may contaminate their lenses with the oils, residues, and possible bacteria found in cosmetics. Some simple precautions can minimize the chance of contamination:

- Keep your makeup dry and avoid touching it with your fingers.
- Always wash your hands before touching your contact lenses, using gentle soaps that are free of cream, deodorant, antiseptics, and heavy fragrances.
- Insert your contacts before applying makeup, and take them out prior to removing makeup.
- Use cosmetics labeled “hypoallergenic,” “for contact lens wearers,” or “for sensitive eyes,” which are designed to be free of irritants.
- Apply makeup lightly close to the eye. You should apply mascara only to the outer half of the lashes, and avoid applying eyeliner inside the lower eyelid.
- Buy fresh mascara, eyeliner, and eye shadow products every three months.
- Hairspray, deodorant, cologne, mousse, nail polish, and nail polish remover should be used only before inserting your lenses to prevent damage to your lenses. If you must use hairspray while wearing contacts, close your eyes tightly while spraying and then leave the area quickly.
- Never wear contacts when using hair dyes, permanent wave lotions, or medicated shampoos.

This information is provided by the American Academy of Ophthalmology.